

which it is capable. From the first, the attention should be primarily directed to the development of the articulated voice, in order to impress in season upon the flexible and elastic organs of the child, the custom of performing those regular motions, which are indispensable to acquire, at the same time, a sonorous voice, a pure pronunciation, and natural and easy inflections. This happy result may almost always be attained by exercising, at an early period, the children, either in speaking or reading aloud; but so as never to compel them by too great a prolongation of this exercise, or allowing them to take a tone too high or too low to tire or strain the vocal organs. They should be forbidden every sort of vocal display or forced cry, and thus their vocal organs, so easily modified at this age, prevented from assuming a harsh or sharp timbre, often too high, and very disagreeable to the ear. They should also be made to pronounce carefully all the syllables, [giving to each its proper quantity and accent,] and so to govern their voices as to make every period of a phrase perceptible. They should also avoid respiring too often, and too suddenly, which may give rise to a sort of hiccup, which not only may have the inconvenience of being ridiculous, but which may often even cause an irritation of the mucous membrane of the vocal cord, and produce an habitual hoarseness, sometimes difficult to overcome."

We commend the essay of M. Colombat to the notice of our readers, not from a belief that in it they will find all the information in regard to the physiology, pathology, and hygiene of the voice, they may desire, but because it is calculated to direct the attention of physicians to an all-important subject that has heretofore been too much neglected, and in relation to which we possess no treatise of any real value. The essay before us is far too concise to present anything approaching to a satisfactory view of the various questions embraced in it—many points equally important with those glanced at by the author, are entirely overlooked—while the chapters devoted to the pathology and the therapeutics of those diseases which either directly or indirectly alter or disturb the voice, are far too deficient in the necessary details to be of advantage to the practitioner—while the unprofessional reader they are only calculated to mislead. Nor is the chapter on the hygiene of the voice one of the leading objects, according to its title-page, of the essay—less exceptionable—the few remarks it contains are sensible enough, but it is very far from containing a full exposition of the causes calculated to injure the voice and the means by which these may be guarded against—while the directions given for developing its powers, accuracy, and harmony, are vague and imperfect.

D. F. C.

ART. XVIII.—*Die gallige dyscrasie (Icterus) mit acuter gelber atrophie der leber.* Von PAUL JOSEPH HORACEK, Doctor der Medicin, magister der augenheilkunde und der geburtshülfe, gewesenem assistentem an den lehrkanzeln der speciellen pathologie und therapie, und der medicinischen kliniken an der k. k. universität in wien, mitgliede der medicinischen facultät. 8vo: pp. 145. Wein, 1844.

The bilious dyscrasia or icterus, with yellow atrophy of the liver. By PAUL JOSEPH HORACEK, M. D., Master of Ophthalmologia and Obstetrics, formerly Assistant to the Professor of Special Pathology and Therapeutics, and to the Medical Clinic of the Royal University of Vienna, Member of the Medical Faculty. Vienna, 1844.

THE author of the present work has presented a very minute account of what he denominates "the most important form of the bilious dyscrasia," and which he considers as a primary or idiopathic disease of the blood, in consequence of which it is no longer in harmony with the nervous life of the organism, and which is invariably accompanied by an acute atrophy of the liver. Dr. Horacek is of opinion that most of the cases of acute jaundice and many of those described as hepatitis, bilious fever, cephalopathia cholotica, pyelephlebitis, &c.—are in fact cases of this disease; of this he is fully convinced, as well by numerous clinical observations of his own, in which the symptoms during life were compared with the morbid appearances presented upon dissection, as by repeated observations made by other physicians.

The views of the author in regard to the pathology, and his history of the symptomatology of the form of icterus of which the monograph before us treats, being somewhat novel, and those views, as well as his description of the disease being professedly based upon close and extensive observations made at the bedside of the sick, a short outline of them may not be unsatisfactory to our readers.

Icterus with yellow atrophy of the liver is characterized, according to our author, by an accumulation of bilious matter in the blood, and its separation from thence in some other than the normal manner; in consequence of which, a general yellow colouring of the several tissues and fluids is produced; by various disturbances of the digestive and assimilative processes; by pain and decreased volume of the liver; by an acute course, often attended by febrile symptoms, but without any determined duration, or crises, and, finally by the fatal termination being preceded by symptoms of exudation and colliquating, of irritation and softening of the brain, produced by the poisonous narcotic influence of the elements of the bile accumulated and retained in the blood, giving rise to delirium, convulsions, insensibility, paralysis and coma.

The constant anatomical characters of the disease are a change in the condition of the blood and the morbid phenomena from thence resulting; the shrunken state of the liver; the increased size and change of texture of the spleen, the hydrocephalic softening of the brain, and indications of colliquation and general relaxation of all the organs.

"The most important alteration is that of the blood—its plasticity being lost in consequence of a diminution of its fibrinous portion, it is in a fluid, softened condition; the small coagula occasionally formed in the cavities of the heart and larger blood-vessels, are soft and easily broken. Its colour is mostly of a dark-brown or a muddy dark-red, and it presents an excessive amount of the yellow pigment of the bile, which not being separated by the appropriate organ, the liver, accumulates in the blood. By the separation of this from the blood, by an abnormal process of secretion or by exosmosis merely, not only is the skin, the cellular texture beneath, and the fat contained in its areola, but, also, the various internal tissues, the parenchyma of the organs, the cartilages, bones, and even the substance of the nerves and muscles, stained of a yellow or some colour modified by yellow. That this colouring is not the result alone of a secretory process, but is caused also by exosmosis, is indicated by the fact, among others, of the yellow stain communicated to the inner coats of the arteries and veins.

"By chemical analysis the bilious matter is not detected merely in the blood and its citron-coloured serum, but also in the different secretions and excretions, in the urine, in the feces, in the saliva, the several mucous secretions, the serous exudations, in the pus of sores and abscesses, and even in the perspiration.

"The liver is contracted to one-half or even one-fourth its normal size. It is reduced in thickness, and its shape is flattened, so that it assumes an orbicular or cake-like form; its peritoneal covering is wrinkled; its substance devoid of blood, of a deep-yellow, greenish-yellow or dirty ochre colour; it is uncommonly flaccid and tough, though often it is easily torn; its granular texture is destroyed so that the different portions of the substance of the organ are no longer distinguishable. The gall-bladder is often contracted, its mucous coat infiltrated with serum, and containing a small quantity of slimy bile of a dirty-green or grayish-yellow colour.

"The spleen is for the most part, almost always indeed, increased in size, having often double or treble its normal volume; it is loaded with blood, but loose in texture, softened, easily torn and frequently reducible by a slight effort into a dark red pulp. It resembles closely that condition in which it is found in typhous and typhoid diseases, pyæmia, anomalous exanthematous efforts, and in drunkards.

"The brain is more generally anæmic than engorged, always infiltrated with serum and softened, often of a pulpy consistence, with more or less effusion of a yellow serum between the meninges and the brain, into the ventricles and at its basis.

"There is often found associated with the above described morbid appearances a colliquation of the mucous membrane, particularly of the stomach. It appears loosened in texture, and of a grayish-green, brownish or very dark-brown colour, often reduced to a soft easily removed pulp. The other coats of the stomach are

either in the same condition or of a pale dirty colour. The softened vessels contain a thick, black grumous blood.

"To the lesions constantly met with may be added the great enlargement and relaxation of the mesenteric glands, the relaxed and anæmic condition of the substance of the heart, the thyroid gland, pancreas, kidneys, uterus and ovaries. The general muscular system appears more or less soft, flaccid and anæmic.

"To the less constant and merely accidental lesions, appertains the passive stasis of the blood in the most depending portion of the lungs—in consequence of which their parenchyma becomes permeated with the thin dark-red, discoloured blood, and is no longer penetrated by the air, but has the denseness of the spleen, is brittle and easily torn. This hypostasis often gives rise to a true inflammatory process, which is indicated by the presence of some one of the products corresponding with the dyscrasia of the blood, and differing in the different stages of the disease. The upper portion of the lungs are, for the most part, anæmic, pale, and of a grayish-red colour.

"The inflammation of the pleura, peritoneum or other organs, occasionally met with, exhibits an evidently passive character; its products are less plastic than those of acute inflammation. In some cases there is met with an inflamed condition of the vena portarum, or some other of the venous trunks of the abdomen, with consecutive depositions of pus in the liver, lungs, or other organs.

"Organic changes of the liver and its appendages, as partial inflammation and abscesses, true hypertrophy, cirrhose and nutmeg degeneration, calculous concretions, melanotic or tuberculous infiltration; contraction or closure of the gall-ducts and gall-bladder, either by the presence of foreign bodies, or the result of disease or of the morbid condition of the neighbouring organs, which are the causes of the purely secondary cholotic diseases, are seldom met with in cases of primary icterus.

"Various other morbid appearances are occasionally met with, which are altogether accidental and have no relation whatever with those produced by the existing dyscrasia of the blood; such as recent, red, softened, chalk-like tubercles, scirrhoue and melanotic masses, hydatids, &c.—in the brain, lungs, kidneys, &c.; dilatation and contraction of the cavities of the heart, hypertrophy and atrophy of its substance, various degenerations of its valves, and defective formations of the large blood-vessels, (&c.) &c."

After this account of the anatomical characters of that form of jaundice which the author describes as invariably connected with yellow atrophy of the liver, we are presented with a history of the disease from its commencement to its close; a brief abstract of which it will be necessary to present that our readers may be able to arrive at correct views as to its diagnosis.

Dr. Horacek divides the progress of the disease into two stages or grades. It may, when excited by some violent cause, attack suddenly, while under other circumstances it is developed gradually.

In the latter case the patient often complains for some weeks of a sense of debility and unconquerable depression, a sluggishness and aversion from his customary and cherished pursuits. He is affected with loss of appetite, particularly a disgust for animal food; nausea, constant eructations, which even when the tongue is clean cause a disagreeable taste in the mouth—there is not unfrequently vomiting of half digested food mixed with a bilious fluid, with a painful sensation at the epigastrium, which is distended and hard. The patient is troubled with flatulence—his bowels are irregular—no stools occurring for several days, and then repeated fluid stools take place unexpectedly. His sleep is disturbed by disagreeable painful dreams, or during many hours of the night the patient is wakeful. He experiences over the back a sense of cold or chilliness which alternates with flushes of heat, without, however, these sensations observing any periodic type. There is a depression of the spirits; the patient from an unaccountable feeling of internal suffering, becomes dejected, indifferent, restless, peevish and fretful. After a shorter or longer continuance of these symptoms the surface, which had early become of a dirty light yellow hue, acquires an intense yellow colour, and with this change in the tint of the skin, often with symptoms of a severe febrile reaction, the disease commences.

Whether the disease is preceded by the prodroma just described, or occurs suddenly, the symptoms of the fever of irritation are seldom absent, which in its

course but rarely transcends the bounds of *erythematic reaction*; when, however, such is the case the chill assumes the character of that observed in synocha. The irregular febrile exacerbations seldom assume any particular type. Nevertheless, when the patient is exposed to causes predisposing to an attack of intermittent, the paroxysms assume often the tertian or quotidian type. In general, however, frequently repeated exacerbations, differing in intensity, occur at irregular periods during the day, and particularly in the evening. The febrile excitement is usually ushered in by a slight transient chill, the heat is principally felt in the head—there very seldom occurs a severe chill followed by a continued dry heat of the surface; in many cases, indeed, these febrile movements are entirely absent, or occur only in a very slight degree.

But little heat of the surface or pain of the head is, for the most part, experienced—the skin is often moist, the thirst is but little increased, the tongue remains moist, the pulse is but little accelerated, full, neither hard nor contracted, but moderately strong. The exacerbations are marked by evident but irregular remissions, or rather intermissions; often after a few days no trace of fever is present; its termination is attended, however, by no critical discharges, nor are such observed throughout the whole course of the disease.

These erythematic febrile exacerbations frequently attend those cases in which the disease is gradually developed in young vigorous subjects, and in whom the nervous predominates over the sanguineous system, and still more frequently when the disease occurs suddenly in such individuals. In this latter case it is often ushered in by cramps and convulsions, and the accompanying fever assumes a higher grade of erythism, and may resemble in its character a synocha. It is then marked by long-continued and repeated chills, increased erectility of the organs generally, pain of the head, abdomen, and right hypochondrium, repeated painful vomiting, redness of the tongue and mouth, increased brightness of the eyes, quick respiration, diminution of the secretions and excretions, increased heat and dryness of all the surfaces, increased thirst, aversion to light and sound, and an accelerated, full, hard and contracted pulse.

"The reaction, even in such cases, very seldom, however, reaches to the true synochial grade, neither is the peculiar violence of reaction, nor the change in the blood—the decrease in its serosity and increase in its fibrin and hematosin—which characterizes the latter, observed; the blood which is discharged spontaneously or obtained by venesection exhibits a decreased plasticity, it seldom coagulates firmly, but separates into a large amount of a muddy, glutinous, yellow serum, and a soft, easily broken, thin, rough, opalescent, pseudo-fibrinous coagulum, which seldom, and only in the commencement of the disease, exhibits any buffy coat. The blood often coagulates into a uniform jelly-like bilious-looking mass, or remains of a thick glutinous consistence, colouring the coats of the vessels of a dark-red or brown colour. The febrile paroxysm has besides no determinate duration, although it is of longer duration generally than the simple erythematic reaction; nevertheless in a few days all febrile symptoms disappear, and the pulse becomes peculiarly slow, frequently beating but forty to sixty strokes in a minute. Occasionally, the fever does not go off, but continues to recur in an irregular manner and with a want of uniformity in its exacerbations, the pulse, during the entire course of the disease remaining tolerably full, contracted and quick; the fever declining with the decline of the general symptoms on the occurrence of a general perspiration, sedimentous urine, normal or pathological discharges of blood, &c.; or in the change of the disease into its second stage or higher grade, the febrile symptoms become amalgamated with the new phenomena which then present themselves."

When the disease occurs in individuals of a phlegmatic venous temperament or of a torpid, flaccid habit, or who have been debilitated by disease, deficient nourishment or other cause, the reaction in the commencement is slight. The energies of the system remain depressed; the pulse, if accelerated, is weak, soft and easily compressed; there is no tendency to crises; passive congestions take place, profuse hemorrhages occur, and with irregular, unequal exacerbations, a torpid form of fever becomes established.

The next most important symptom—which is in fact, the most constant and diagnostic,—is the excessive formation and accumulation in the blood of bilious matter, and the consequent morbid coloration of the tissues and fluids of the body.

The icteric colour of the surface commences gradually to form even before the full development of the disease; or when the attack commences with convulsive symptoms, it takes place in a few hours, in very different degrees, often however to a very intense degree. The yellow colour ordinarily shows itself first in the conjunctiva of the eyes, from whence it spreads, in succession, over the face and breast, trunk and limbs, so that, in a short time, the entire surface presents the same jaundiced hue. The colour of the skin varies from the brightest to the most intense yellow; often it has a dirty, greenish, bronze-like hue, and very often it exhibits a tint of red mixed with the yellow. In the commencement of the disease, or in the lower grades, the skin is of a light-gray or clear yellow, the colour becoming gradually deeper as the disease proceeds. The colour is always the most intense on the face, neck, breast, abdomen and inner surface of the limbs.

In the commencement of the attack the urine is of a dark red colour, and gradually changes to a dark brownish red, or the colour of a strong infusion of coffee, with often a shade of dirty green; it is more frequently clear and transparent than troubled and muddy. It frequently exhibits a slight amount of sediment of a dirty yellow, lateritious, brownish-red, or dark brown colour. It is disposed readily to putrefy, and the more so the more it is saturated and troubled. Portions of white linen or paper dipped in it are stained of a saffron colour.

The irregular discharges from the bowels—sometimes fluid, and at others of a pulpy consistence—are generally dark coloured; deep yellow, brownish yellow, or solid discharges of a brown, grayish, white, or clay colour, are more seldom observed than is generally supposed. The discharges are often tar-like, or similar to elder syrup. By the escape of the dissolved blood through the mucous membrane, dark coloured masses are often formed, and are found accumulated in the bowels after death.

In the higher grades of the disease, with a dry, harsh skin, there is often experienced an intense itching of the surface, which robs the patient frequently of his nightly rest. Occasionally all objects viewed by the patient, if white, appear yellow, and, if coloured, present a hue modified by yellow.

All the symptoms indicative of a disturbed state of the digestive organs, which marked the premonitory period of the disease, continue and often become increased after its onset. There are repeated vomitings during the first few days, of a watery slimy fluid of a deep or yellowish-green colour, and of a bitter acrid taste. There is often an increase of thirst, with a desire for cooling, acidulated, or even vinous drinks.

There is very generally considerable flatulence, and more or less of a painful sensation in the abdomen. The latter often consists merely of a feeling of distension, weight, and fullness of the epigastrium, with occasional paroxysms of sharp colicky pains about the navel; more frequently, however, the patient complains of continued pain in the region of the liver—this, in by far the greater number of cases, is experienced at the very commencement of the attack, and continues during its entire course. This pain, which is entirely nervous, is confined to one portion of the liver, particularly of the left lobe, and so circumscribed that the patient can himself indicate its boundaries. In the higher grades of the disease the abdomen is the seat of the most severe, cutting pains, either continued or occurring in paroxysms, and which no anodyne or position of body has the power to assuage. These pains are increased by pressure, causing the patient to scream out, and producing a contortion or convulsive motion of his features. They are seldom attended by meteorism of the abdomen, which, on the contrary, by the contraction of the abdominal muscles, is more generally retracted.

The pain of the abdomen is intimately connected with the progress of atrophy in the liver, with the increase of which it augments in intensity. The decrease in the size of the liver can be easily detected in the higher grades of the disease, by palpation and percussion of the abdomen. By close attention, and repeating the examination daily, even in the lighter grades, it is possible, we are told, to detect the atrophy of the liver, by the dull sound which the liver gives upon percussion, which is usually heard over a space for about two inches from the left, and two and a half from the right side of the xyphoid cartilage, three inches below the nipple, and four inches below the axilla, becoming weaker and more and more confined within these limits. In the higher grades of the disease, when

the liver has become reduced in thickness, the dull sound is scarcely to be detected at all, particularly when the intestines are distended with gas.

The augmentation in the size of the spleen may readily be detected by palpation and percussion; it is attended, also, with a sense of weight and tenderness of the left hypochondrium; and in the higher grades of the disease often gives rise to hemorrhages from the nose, bowels, &c.

The disease is attended throughout by the same sense of debility and lassitude, the same morbid sensibility of the external senses, the same depression of mind, and fretfulness, and irritability of temper, which marked its premonitory stage. The patient has a peculiar suffering expression of countenance, the brows are contracted and depressed, the forehead wrinkled, the eyes half closed, while the half open mouth has an expression somewhat resembling the *risus sardonius*. The angles of the mouth and eyelids have often a tremulous convulsive movement.

"The foregoing symptoms continuing, and gradually augmenting in violence, the strength of the patient finally begins to sink—he is affected with a general apathy, a kind of paralysis of the power of the muscles; there are diminished strength, and an increased frequency of the pulse, a complete change in all the secretions and excretions, and a gradual coming on of a complete comatose state, or there suddenly occur cephalico-nervous symptoms, as inordinate restlessness, delirium, and tonic and clonic spasms. These phenomena announce the occurrence of the second stage, or that of the complete hypertrophy of the liver.

"In the larger number of cases this stage commences with coma, which ensues either suddenly, and arrives quickly at its height, or comes gradually on—the patient complaining at first of excessive lassitude and sluggishness, a leaden weight of the limbs, heaviness and oppression of the head, and an almost irresistible inclination to sleep. There is at the same time a return of the nausea and vomiting. When the patient is aroused from his lethargic, stupid condition, it is with difficulty, and only by degrees that entire consciousness is restored. On opening his eyes the pupils are found to be greatly dilated and somewhat insensible to light; he gives slow, often irrelevant answers, with a stammering tongue, to the questions put to him; he murmurs unintelligible words to himself, and falls soon again into a state of quiet muttering delirium, or into a deep sleep, which is seldom broken excepting by momentary startings. This stage of the disease is often marked by a disturbance of motility, followed in a short time by a comatose paralytic condition, in which there are complete unconsciousness and entire loss of all volition. Involuntary discharges now take place from the bowels and bladder—there is a complete prostration of strength, the temperature of the surface often rises, and the skin often becomes bathed in a copious viscid perspiration, the pulse becomes very slow, small, weak, and vibrating, and death soon ensues.

A very common symptom preceding the occurrence of the comatose condition, is frequent unexpected paroxysms of delirium. The patient, sometimes, after long continued watchfulness, and often suddenly, is seized with distortion of visage, and, with half closed eyes, throws himself about, and talks incessantly, screaming and ranting—complains of pain in the region of the liver, is averse to light, attempts frequently to escape from his attendants; but destitute of the morbid strength which accompanies the delirium of phrenitis, he is without difficulty controlled. The delirium is seldom attended by a proportionate irritation of the blood-vessels and general turgescence. The skin, although warm, is soft and moist, the head of only moderate warmth, the eyes are little or not at all reddened, there is seldom any pulsation of the carotids, and the pulse at the wrist, although frequent, is without strength. The delirium is marked by remissions of short duration, during which the patient has a disturbed sleep. The delirium is often succeeded by convulsions, or the patient falls into a comatose condition.

A less constant symptom is cramp. In many cases there is merely a tremulous motion of the face, in others the muscles of the eyes, jaws, neck, throat, breast, abdomen and extremities, particularly the upper, are affected with severe tonic and clonic spasms, which are repeated at irregular short intervals, until finally, the organism is exhausted and the patient falls into a state of coma.

After a minute description of the symptoms and progress of the disease, the author proceeds to consider its combinations—1st, with infiltration and softening of

the mucous coat of the stomach and duodenum, attended with repeated, painless vomiting of a fluid of a dark brown colour, or resembling turbid coffee or coffee grounds—a similar softening of the uterine mucous membrane occurs in pregnant and puerperal females, especially when powerful abortive remedies have been employed; 2d, with delirium tremens in drunkards; 3d, with typhoid or dysenteric symptoms; 4th, with various eruptions of the skin; 5th, with various internal inflammations; 6th, with hysteria, hypochondriasis, epilepsy, and with neuralgia of the ganglionic nerves, and hence with intermittent fever; 7th, with hemorrhages; 8th, “one of the most formidable combinations of the bilious dyscrasia,” remarks Dr. H., “is that with the phlebitis of the abdominal veins; of this latter the dyscrasia of the blood and the rapid atrophy of the liver may be considered as the exciting cause. Dr. H. considers it probable that the inflammation of the vein may be caused by a partial thickening or coagulation of the blood, the presence of which produces a reaction in the neighbouring tissues of the vessels, and a plastic exudation by which its calibre is closed; the exudation being gradually converted into pus by the reaction of the system, against the noxious effects of which we have the symptoms of phlebitis added to those of the preceding icteric disease.”

The idiopathic bilious dyscrasia is most liable to occur, according to our author, in young persons; it is seldom observed before puberty or after the 50th year. Both sexes are equally liable to it—though more females than males, below the middle term of life are attacked, and more males than females after that term. No constitution affords immunity against the disease. Individuals, however, of a nervous, irritable temperament, of a venous, or, as it is termed, an atrabiliary constitution, as well as those of an ardent, slighty, dark bilious temperament are most liable to its attacks. There is in certain families a hereditary predisposition to the disease. Preceding as well as existing general diseases which depress the nervous power and diminish the blood; particularly, those diseases attended by fluid discharges, or imperfect hematosis, or general anæmia, chlorosis, dysenteric affections, &c.; repeated losses of blood, the mercurial cachexia, poisoning with lead, sudden suppression of normal or habitual pathological discharges, and the various nervous affections, may be ranked among the causes as well predisposing as exciting, of the bilious dyscrasia, as may also the abuse of emetics, drastic purgatives, abortives, mercury, &c.

“The close of summer and autumn appear more favourable to the occurrence of the bilious dyscrasia than the other periods of the year; it is favoured, also, by long-continued, warm, damp weather, with diminished electricity of the air, by an atmosphere loaded with organic emanations, and by sudden changes of atmospheric temperature. By the latter, an epidemic occurrence of icterus may even be produced. The disease is, also, endemic in certain localities.”

Among the circumstances which predispose to an attack of the bilious dyscrasia, are, Dr. H. enumerates, inattention to appropriate and comfortable clothing—rioting at night—irregularity in respect to sleep, sleeping in the open air, exposure to wet, sudden suppression of perspiration, uncleanness of person, the abuse of strong fermented drinks, and unwholesome, stimulating, fat, crude or tainted food; violent fits of anger—terror—long-continued grief—disgust—silent brooding anger or grief; blows upon the epigastrium and right hypochondrium, or upon the head, sudden concussions from falls, injuries of the brain, or of many nervous trunks or branches, and the bites of certain serpents, or of an enraged animal.

That the morbid phenomena described by Dr. H. as those indicative of a primary diseased condition of the blood, from an increased formation and accumulation in the circulating fluid of the materials of bile, and accompanied invariably by a peculiar form of atrophy of the liver, are of frequent occurrence, there can be no doubt. The correctness of the author's views in respect to the pathological cause of the phenomena referred to—whether they are in fact the result of a primary disturbance in the function of hematosis, or whether, on the contrary, the dyscrasia of the blood as well as many of the morbid phenomena referred to it, may not be the result of local disease, either of the liver or of the alimentary canal—and whether, hence, the symptoms he describes as those characterizing a single pathological affection are not rather the secondary results of various diseases, differing in character and location, must be determined by the results of future and more extended observations.

The monograph of Dr. H. is a very interesting one, and affords matter worthy the consideration of the pathologist.

In an appendix the history of 21 cases, detailed by the author or selected from various sources, from Morgagni, Andral, Dance, Aldis, Heyseldor, Löschner, Schönlein, Scherer, &c.,—are given in illustration of the views advanced in the body of the work.

D. F. C.

ART. XIX.—1. *Reports of the Board of Visitors, and Trustees, and of the Superintendent of the New Hampshire Asylum for the Insane.* Concord: 1845, pp. 24.

2. *Report of the Maryland Hospital for the year 1844.* Baltimore: 1845, pp. 18.

1. THE State Asylum for the Insane, in New Hampshire, appears to be in a flourishing condition. During the past year its accommodations have been increased by the erection of a building for the violent and noisy patients. "It is a well-constructed edifice," says the report of Dr. Chandler, "two stories high, with eight rooms for patients on each story, besides a room for the nurse in the second story. The rooms on the lower story are warmed by furnaces, and by the smoke pipes passing under the stone floors. By these means they can at all times be sufficiently warmed for those patients who will not wear sufficient clothing for that purpose. In addition to this, a current of heated air is thrown into the spaces in front of the rooms in each story, and then passes off through the rooms, by ventilating openings, to the attic. By these means the apartments have been kept at a proper temperature, and have been pretty well ventilated."

	Males.	Females.	Total.
Patients in the Asylum, May 31, 1844	33	37	70
" admitted during the year	42	46	88
Whole number during the year	75	83	158
Discharged and died	36	46	82
Remaining, May 31, 1845	39	37	76
Discharged cured	22	15	37
Died	2	4	6
Whole number of patients since the asylum opened, Oct. 29, 1842	129	139	268
" " " discharged cured	49	37	86

The various means included under the head of *moral treatment*, particularly manual labour, the most important of them all, appear to be brought into extensive use, with the same satisfactory results which have attended their introduction into other institutions for the insane.

2. From the report of Dr. Fisher, of the Maryland Hospital, we extract the following judicious remarks upon the subject of mechanical restraints upon the limbs of the insane:—

"With respect to corporeal restraints, we have to say that we are not yet prepared to give them up entirely; the mildest forms only are used, but never unless directed by the physician. With us they are never resorted to as a punishment, but merely as a necessary means to prevent the patient doing mischief; and of this we endeavour to make him sensible. We recollect no instance during the last year, in which more than two out of the whole number of inmates were at any one time subjected to such restraints. Possibly we might have dispensed with them altogether, did we not believe that the welfare of the patients would be better promoted by their judicious use. The leather muff, mittens, and straps, are the only apparatus employed; and they are always laid aside as soon as the condition which called for their use ceases. It has been remarked that the degree in which personal restraint is required, depends very much upon the character of the attendants—that many paroxysms of excitement, or acts of violence, which appear to justify restraint, would be prevented by a little kind consideration and judgment. There are many ways which can hardly be specified, by which an attendant may provoke a patient; nor are the arts by which an irritable, excitable mind is soothed, more easy of description. Certain it is, that the restriction of the power of attend-